

PROJECT INFORMATION DOCUMENT (PID)
APPRAISAL STAGE

Report No.:

Project Name	Philippines Renewable Energy Development (P147646)
Region	EAST ASIA AND PACIFIC
Country	Philippines
Sector(s)	Other Renewable Energy (60%), Transmission and Distribution (40%)
Theme(s)	Climate change (60%), Infrastructure services for private sector development (30%), Regulation and competition policy (10%)
Lending Instrument	Partial Credit Guarantee
Project ID	P147646
Borrower(s)	Department of Energy
Implementing Agency	LGU Guarantee Corporation
Environmental Category	F-Financial Intermediary Assessment
Date PID Prepared/Updated	25-Sep-2013
Estimated Date of Board Approval	19-Dec-2013
Decision	Proceed to appraisal
Other Decision	

I. Project Context

Country Context

The Philippines is an archipelago nation in Southeast Asia with a population of over 96-million and a per capita gross national income of US \$2,500 in 2012. The economy grew by 6.6 percent in 2012, a solid recovery from the relatively low 3.9 percent outturn for 2011. Higher growth was driven by a recovery in net exports and government spending, and robust private consumption. Inflation and interest rates have trended lower and liquidity in the financial sector is robust. The World Bank projects strong growth for 2013 as well. Political commitment and strong macroeconomic fundamentals provide a window of opportunity for investing in inclusive growth by accelerating the implementation of reforms that improve the business environment for firms of all sizes, and by boosting public investment in key infrastructure. Faster human capital accumulation will enhance productivity and drive growth in the medium term by enabling the country to shift gears towards higher value-added activities and more innovation. This must be complemented by adequate investment in infrastructure. The power sector, where private capital dominates, is a particular focus as reliable and affordable electricity supply is a top concern of both businesses and households.

Sectoral and institutional Context

The Philippines has experienced more than two decades of significant change in the electricity sector. As a consequence of major supply crises in the sector in the 1980s and 1990s, the Philippines passed the Electric Power Industry Restructuring Act (EPIRA) in 2001; this law has fundamentally transformed the

electricity sector from one with significant public sector ownership and operation of key components (generation, transmission) and with little competition, to one that is almost completely privately owned and operated and with significant and growing competition. EPIRA created the Energy Regulatory Commission (ERC) to regulate retail electricity tariffs, transmission and distribution services and tariffs and to monitor market competition, established the Wholesale Electricity Spot Market (WESM, which currently is in commercial operation in Luzon and the Visayas), and transferred National Power Corporation (NPC – previously, the main national power utility) state assets and liabilities to the Power Sector Assets and Liabilities Management (PSALM) Corporation. PSALM has executed a major program of generation asset sales, appointment of private IPP Administrators (IPPAs) to manage efficiently and compete in the market the energy generated by independent power producers that signed power purchase agreements (PPAs) with NPC prior to the start of the power sector reform program, and the concession for the country's high-voltage transmission network.

The country does not have an integrated, national electricity transmission network. There are two major regional grids (Luzon-Visayas, and Mindanao), and many smaller islands with isolated grids. Where there are connections between and among islands, these are often with limited exchange / transmission capacity, and even the integrated transmission network is subject to conditions of significant constraints (including the direct current (DC) link between the Luzon and Visayas networks). In this geographical context, 139 electricity distribution companies operate. 20 of these utilities are privately owned, are primarily urban distributors, and include the largest distribution companies in the country – Meralco (serving Manila), Davao Light & Power (Davao City), and Visayas Electricity Company (VECO, in Cebu City). 119 electric cooperatives provide the bulk of electricity services in smaller cities and in rural areas. Despite challenging geography, these service providers are reaching most of the country. The Government considers the country to be fully electrified at the barangay (village or district) level, but there are many sitios (enclaves) that do not meet the Government definition of “electrified” (which can include electrification of some public facilities by photovoltaic (solar) installations). And household electrification is a work-in-progress – the penetration rate of 83% means that over 3-million households remain unconnected.

Based on the 2012 assessment of the Department of Energy (DOE) power generation dependable capacity is 15,000 MW, with gross generation of over 70,000 GWh – of which about 27% was from renewable sources, and another 29% from domestically produced natural gas. Annual per capita consumption is about 600 kWh (low by the standards of middle income countries) and prices are high by regional standards – only Japan, among the larger countries of East Asia, has average tariffs higher than that of 15.5 cents/kWh of the Philippines (average for all distribution companies, data from ERC 2010). High electricity tariffs in the Philippines bear some explanation. It is important to recognize that one of the impacts of EPIRA has been to eliminate almost all subsidies (and cross-subsidies) that had prevailed previously. Generators (and therefore, ultimate consumers) face market prices for coal, natural gas, and oil. This accounts for some of the differences in electricity prices when compared with, say, Indonesia (where tariffs are set below cost and the Government makes a multi-billion dollar, annual transfer to keep PLN whole) and Vietnam (where domestic gas and coal prices are set far below international levels). The archipelagic geography of the Philippines is also a cost factor. Finally, there are legacy costs related to past policy decisions that are still being paid for.

Generation investment in the electricity sector since the mid-1990s has been private sector-led. Thousands of megawatts of capacity have been purchased from the state by private firms including Aboitiz, FirstGen, San Miguel, and AES. Thousands more megawatts have been built, or are under construction, by those firms and others like GN Power, Kepco, Steag, and other, mostly local firms. Outside of Mindanao, electricity supply is adequate, and even improving (particularly in the Visayas grid), despite medium-term concerns about supply adequacy in Luzon. In hydro-dependent Mindanao,

there are growing energy shortages and the island's electricity customers risk being plunged into the dark in the event of a drought unless new generation is built.

In this setting, Government strategy is to push through the remaining elements of market reform and generation privatization, electrify 90% of households by 2017, manage electricity costs and the related price risk to consumers, accelerate reform and restructuring of the electric cooperatives, and ensure that a diversified and clean mix of new generation is developed. Two significant challenges can be highlighted. First, over 80% of all credible generation projects under construction or development are coal-fired. Second, moving new power plants from development to actual construction requires creditworthy buyers for that power – and some of the country's ECs remain financially weak. Because they are regulated on a non-profit basis, the ECs have an operating margin of only 1%, underscoring the financing challenge for the rural electrification sector as a whole. Any strategy to meet electricity demand, improve the quality of power supply, and expand access in a sustainable manner will need to address the twin challenges of lessening the country's dependence on coal-fired power plants for incremental generation needs, and improving EC finances (by reducing losses and improving commercial performance).

The country's energy strategy aims to triple the installed capacity of renewable energy (RE) by 2030, to over 15,000 MW of capacity. It has a good base of larger geothermal and hydro projects on which to build, but the contribution of other types of renewable energy – small hydro, biomass, wind, solar – is low (73 MW only, which is less than 0.5% of total capacity). The Renewable Energy Act 2008 aims to accelerate the development of renewable energy (RE) sources. The Act provides a diverse set of policy incentives including feed-in tariffs (FIT) for specific on-grid emerging technologies, and mandates an overall Renewable Portfolio Standard (RPS) and associated market for Renewable Energy Certificate (REC) trading. The proposed PHRED Project will fund RE projects additional to those which seek to avail of the feed-in tariffs; PHRED-supported projects will help utilities meet their RPS and, in many cases, it is expected that these projects will generate sale-able REC's for the electric cooperatives.

This project is proposed for financing by the Clean Technology Fund. The CTF Trust Fund Committee approved the Philippines CTF Investment Plan in December 2009, with an allocation of \$250-million. A portion of this total was allocated for energy efficiency and renewable energy. The proposed project seeks to help finance renewable energy projects that are less likely to obtain commercial financing – especially in the small hydro sector – while also supporting supply-side energy efficiency in the rural electricity sector. The country's ECs are at the heart of this approach, as developers and/or offtakers (for generation projects) and as operating companies (for energy efficiency investments). This approach is aligned with a key element of the CTF investment plan – that of improving the financial strength of the ECs so that they will be more reliable buyers of renewable energy over time.

The proposed project is designed to expand the capacity of the Government's Electric Cooperative Partial Credit Guarantee (EC-PCG) program. This successful Government program is currently supported by a Global Environmental Facility (GEF) grant – the Electric Cooperative System Loss Reduction Project, or ECSLRP, with IBRD as the implementing partner. The proposed instrument is a CTF Guarantee with a ceiling amount of \$44-million. By expanding the capacity of the existing EC-PCG facility, an estimated \$500-million in private sector investment will flow into the electric cooperative and renewable energy sector.

II. Project Development Objective(s)

The higher order objective of the proposed project is to assist the Philippines in meeting the demand for electricity and to increase access to electricity in a sustainable manner. The Project Development Objective is to increase renewable energy generation in all parts of the Philippines, including in

off-grid areas, and to bolster private sector lending to electric cooperatives that are focused on operational and financial efficiency. It is expected that thereby ECs will be able to provide service to more customers and with better quality, while at the same time becoming more creditworthy and therefore better able to develop and/or purchase bulk renewable energy.

III. Project Description

Component Name

Partial Credit Guarantee Facility

IV. Financing (in USD Million)

Total Project Cost:	500.00	Total Bank Financing:	0.00
Total Cofinancing:	500.00	Financing Gap:	0.00
Financing Source			Amount
Private Sector (electric cooperatives, banks, private companies)			500.00
International Bank for Reconstruction and Development			0.00
IBRD Guarantee			0.00
Clean Technology Fund (Partial Credit Guarantee)			44.00
Total			500.00

V. Implementation

The implementing agencies will be the Department of Energy and LGUGC. LGU Guarantee Corporation is a private entity owned by the Philippines Banker's Association and the Development Bank of the Philippines. LGUGC will continue in its role, under contract to the Department of Energy, as the program manager of EC-PCG. The Guarantee Agreement will be with LGUGC, acting on behalf of EC-PCG. It will include references to other key agreements including the program management agreement between DOE and LGUGC and the LGUGC-NEA co-financing agreement. IBRD, acting on behalf of CTF, will execute a Cooperation Agreement with DOE.

The National Electrification Administration (NEA) has emerged as a key partner agency in EC-PCG and this role will be strengthened going forward. NEA is the apex agency of the electric cooperative sector, and works with ECs on development of investment plans and on identification of potential generation options. As mentioned above, NEA effectively plays a key role in originating loans. Once an EC investment plan has been identified for potential financing through EC-PCG, the EC in question is briefed on the merits of the program, and LGUGC is brought in to perform the initial due diligence activities. If everything is positive, an offering memorandum is presented to several of the accredited financial institutions – AFI's, the commercial banks that make the loans that EC-PCG backs – while in parallel the investment plan is put through the ERC approval process. NEA is also working closely with other government agencies and the Bank team on the development of the small hydro generation pipeline that is the main target for the RE window.

VI. Safeguard Policies (including public consultation)

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment OP/BP 4.01	X	
Natural Habitats OP/BP 4.04	X	
Forests OP/BP 4.36		X
Pest Management OP 4.09	X	
Physical Cultural Resources OP/BP 4.11	X	
Indigenous Peoples OP/BP 4.10	X	
Involuntary Resettlement OP/BP 4.12	X	
Safety of Dams OP/BP 4.37	X	
Projects on International Waterways OP/BP 7.50		X
Projects in Disputed Areas OP/BP 7.60		X

VII. Contact point

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